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10/798,729	03/10/2004	Hanbai Liu	USP2447A-HL2	5015

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EXAMINER
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NGUYEN, PHILLIP H

ART UNIT	PAPER NUMBER
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2191

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/798,729

Applicant(s)

LIU, HANBAI

Examiner

Phillip H. Nguyen

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to the original filing of March 10, 2004. Claims 1-20 are pending and have been considered below.

#### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35 of copending Application No. 10/633,341. Although the conflicting claims are not identical, they are not patentably distinct from each other because limitations in one claim can obviously be applicable in the corresponding claim(s).

The following tables show few claims to demonstrate the reason for rejection.

Applicant No.: 10/798,729	Application No.: 10/633,341
<p>1. A visual programming system, comprising:</p> <ul style="list-style-type: none"><li>- one or more function modules, each of which is provided with an applicable functional program or command stored in a computer executable language in a processing unit to accomplish a substantial application function; and</li><li>- one or more programming flow lines connecting said function modules with each other in a predetermined sequence to construct a visual graphic program which is compiled to machine readable codes of said computer executable language so as to construct said visual graphic program in said computer executable language in said processing unit for executing said applicable functional programs or</li></ul>	<p>1. A visual programming system, comprising:</p> <ul style="list-style-type: none"><li>- one or more function modules each of which is provided with an applicable functional programming command stored in a computer executable language in a processing unit to accomplish a substantial applicable function; and</li><li>- one or more commanding flow arrows connecting the function modules with each other in a predetermined sequence to construct a visual graphic program which is compiled to machine readable codes of said computer executable language, wherein information outputted from said applicable functional programming command of one of said function modules is inputted to another said</li></ul>

<p>commands of said function modules one after another in said predetermined sequence.</p>	<p>applicable functional programming command of another said function module that is connected with said one of said function modules by said commanding flow arrow, so as to construct said visual graphic program in said computer executable language in said processing unit.</p>
<p>2. The system, as recited in claim 1, further comprising one or more determination modules each of which is provided with a determining test stored in computer executable language in the processing unit, wherein each of said determination modules is provided with an determination entrance, a "True" exit and a "False" exit to connect with three of said function modules and other said determination modules by three of said programming flow lines to construct said visual graphic program, wherein after said</p>	<p>2. The system, as recited in claim 1, further comprising one or more determination modules each of which is provided with a determining test stored in computer executable language in the processing unit, wherein each of said determination modules is connected with three of said function modules and other said determination modules at an determination input, a "True" output and a "False" output thereof by three of said commanding flow arrows to construct said visual graphic program, wherein after said</p>

<p>visual graphic program is compiled to machine readable codes, each of said determination modules executes said determining test according to said predetermined sequence.</p>	<p>visual graphic program is compiled to machine readable codes, each of said determination modules conducts said determining test to send information inputted selectively to said function module or said determination module connected to said "True" output and said "False" output.</p>
<p>3. The system, as recited in claim 1, wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules by two of said programming flow lines, wherein each of said programming flow lines is connected from said connecting exit of one of said function modules to said connecting entrance of another of said function modules.</p>	<p>3. The system, as recited in claim 1, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said function module, information inputs to said applicable functional programming command of said function module from said another function module that outputs said information.</p>

<p>4. The system, as recited in claim 2, wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines, wherein by means of said programming flow lines, said connecting exit of one of said function modules is capable of connecting with said connecting entrance of another of said function modules.</p>	<p>4. The system, as recited in claim 2, wherein each of said function modules has at least an information input for inputting information and an information output for outputting computed information, wherein when said commanding flow arrow has an arrow end connected to said information input of one of said function modules and another starting end connected to said information output of another said function module, information inputs to said applicable functional programming command of said function module from said another function module that outputs said information.</p>
<p>5. The system, as recited in claim 2, wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines, wherein by means</p>	<p>5. The system, as recited in claim 2, wherein each of said function modules has at least an information input for inputting information from one of said determination modules, when said commanding flow arrow has an arrow end connected to said information input of one of said function</p>

<p>of said programming flow lines, said connecting entrance of one of said function modules is capable of connecting to one of said "True" exit and said "False" exit of another said determination modules and said connecting exit of one of said function modules is capable of connecting with said determination entrance of one of said determination modules.</p>	<p>modules and another starting end connected to either said "True" output or said "False" output of said determination module, information inputs to said applicable functional programming command with respect to said function module from said determination module that outputs said information.</p>
<p>6. The system, as recited in claim 5, wherein a construction of said function modules, said determination modules and said programming flow lines is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.</p>	<p>6. The system, as recited in claim 1, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.</p>
<p>6. The system, as recited in claim 5, wherein a construction of said function modules, said determination modules and said programming flow lines is displayed</p>	<p>7. The system, as recited in claim 4, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed</p>



by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.	by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.
6. The system, as recited in claim 5, wherein a construction of said function modules, said determination modules and said programming flow lines is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.	8. The system, as recited in claim 5, wherein a construction of said function modules, said determination modules and said commanding flow arrows is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function.
7. The system, as recited in claim 6, wherein human readable source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database.	9. The system, as recited in claim 1, wherein human readable source codes of a source code program are converted and arranged into different said function modules of said visual graphic program according to a conversion rules database.
7. The system, as recited in claim 6,	10. The system, as recited in claim 4,

wherein human readable source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database.	wherein human readable source codes of a source code program are converted and arranged into different said function modules and said determination modules of said visual graphic program according to a conversion rules database.
7. The system, as recited in claim 6, wherein human readable source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database.	11. The system, as recited in claim 5, wherein human readable source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- Claims 1-10 recite, a system but it appears reasonable to interpret this system by one of ordinary skill in the art as software per se. Applicant's specification provides no explicit and deliberate definition of the components ("function modules" and "programming flow lines") that make up the system other than they could be software components, which are directed to functional descriptive material, per se, and are therefore non-statutory.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4, 5, 12, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Regarding claims 4 and 5, recite "...an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines..." is unclear to Examiner. There are only two programming flow lines (one entrance and one exit), but there are three modules (two function modules and one determination module) needed to connect. How can one function module connect to two other function modules and one determination module with only two programming flow lines.
- Regarding claim 12, recites "...determination modules is connected with three of said function modules and other said determination modules...by three of said

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programming flow lines..." is unclear to Examiner. There are at least four modules needed to connect, but only three programming flow lines available.

- Regarding claim 15, recites "...connect with two of other said function modules and said determination modules by two of said programming flow lines..." is unclear to Examiner. There are at least three modules are needed to connect, but only two program flow lines are available.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gendron et al. (United States Patent No.: 4,860,204).

As per claim 1:

Gendron discloses:

- one or more function modules, each of which is provided with an applicable functional program or command stored in a computer executable language in a processing unit to accomplish a substantial application function (see at least col. 8, line 14-16 "**A visual program is a logical sequence of executable computer instructions expressed by grouping graphical non-linguistic,**

**descriptions for operators and data” and col. 11, line 8-10 “A Visual Program is a set of Softrons connected by parameters and control lines. Softrons are therefore program modules...”); and**

- one or more programming flow lines connecting said function modules with each other in a predetermined sequence to construct a visual graphic program which is compiled to machine readable codes of said computer executable language so as to construct said visual graphic program in said computer executable language in said processing unit for executing said applicable functional programs or commands of said function modules one after another in said predetermined sequence (see at least col. 8, line 18-24 **“All programming constructs are created by arranging lines and boxes on the screen. The lines and boxes control execution flow, define what data is shared among program segments...the graphical translator converts the diagram directly to the executable computer instructions”**).

As per claim 2:

Gendron discloses:

- one or more determination modules each of which is provided with a determining test stored in computer executable language in the processing unit, wherein each of said determination modules is provided with an determination entrance, a "True" exit and a "False" exit to connect with three of said function modules and other said determination modules by three of said programming flow lines to

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construct said visual graphic program, wherein after said visual graphic program is compiled to machine readable codes, each of said determination modules executes said determining test according to said predetermined sequence (see at least col. 11, line 47-64 **"...when control enters the Softron, execution of the machine begins...control leaves the Softron on the Control Out line... in some cases, control will not leave this way, but instead will go back the way it came... this happens when there is a Boolean (true or false) condition to be evaluated in the Machine (like an "IF" construct) and the condition is false..."** - Note: Softrons are included both function modules and determination modules; also see at least FIGS. 12-15).

As per claim 3:

Gendron discloses:

- wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules by two of said programming flow lines, wherein each of said programming flow lines is connected from said connecting exit of one of said function modules to said connecting entrance of another of said function modules (see at least col. 11, line 35-46 **"Parameters may be passed to the Softron via the Parameter In line...if the Softron will provide any results as parameters to other Softrons, they flow out the Parameter Out line"**).

As per claim 4:

Gendron discloses:

- wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines, wherein by means of said programming flow lines, said connecting exit of one of said function modules is capable of connecting with said connecting entrance of another of said function modules (see at least col. 11, line 35-46 **"Parameters may be passed to the Softron via the Parameter In line...if the Softron will provide any results (again, in the form of Softrons) as parameters to other Softrons, they flow out the Parameter Out line"** – Note: Softrons are included both function modules and determination modules; also see at least FIGS. 12-15).

As per claim 5:

Gendron discloses:

- wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines, wherein by means of said programming flow lines, said connecting entrance of one of said function modules is capable of connecting to one of said "True" exit and said "False" exit of another said determination modules and said connecting exit of one of said function modules is capable of connecting with said determination entrance of

one of said determination modules (see at least col. 11, line 35-46 **"Parameters may be passed to the Softron via the Parameter In line...if the Softron will provide any results (again, in the form of Softrons) as parameters to other Softrons, they flow out the Parameter Out line"** – **Note:** Softrons are included both function modules and determination modules; also see at least FIGS. 12-15).

As per claim 6:

Gendron discloses:

- wherein a construction of said function modules, said determination modules and said programming flow lines is displayed by said processing unit via a monitor thereof as said visual graphic program which directly represents said computer executable language to be stored in said processing unit to operate and function (see at least FIG. 3; see at least col. 8, line 35-37 **"When the user first begins to create a program at a Visual Programming workstation, he or she will see a screen that allows..."**; also see at least col. 10, line 24-26 **"The Visual Programming Environment offers computer support for the on-screen creation of software design diagram"**; **Note:** this is visual programming environment, user must see modules and lines in order to design a visual program).



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As per claim 7:

Gendron discloses:

- wherein human readable source codes of a source code program are converted and arranged into said different function modules and said determination modules of said visual graphic program according to a conversion rules database (see at least col. 8, line 28-31 **"The Visual Programming Environment has a rich structured library of elemental software units, call Softrons, to use as a starting point for development of a computer program"**).

As per claim 8:

Gendron discloses:

- a user editing interface to construct said visual graphic program by selecting said function modules and said determination modules and linking said function modules and said determination modules being selected by said programming flow lines (see at least col. 10, line 24-26 **"The Visual Programming Environment offers computer support for the on-screen creation of software design diagram"**), and a compiler which is used to convert said human readable source code program into said machine readable codes of said computer executable language following predetermined conversion instructions of a conversion rules database (see at least col. 8, line 22-24 **"the graphical translator converts the diagram directly to the executable computer instructions"**).

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As per claim 9:

Gendron discloses:

- wherein said user editing interface comprises a function module selection panel, a selected module panel, and a editorial management panel, wherein said function module selection panel comprises selectable commands, including determining test commands in human readable programming languages, programming flow lines representing direction of flow of said program and functional commands, wherein when a command is selected from said function module selection panel, said command being selected appears in said selected module panel and, by arranging said commands being selected into a flow chart form, said visual graphic program is completed (see at least col. 12, line 14-37 **"in using a Softron in a Visual Program, the user normally follows a defined sequence. First, he or she selects (or if necessary, creates) the Softron itself...."**; **Note:** Therefore, It is inherent in the Gendron in order to create a visual graphical program).

As per claim 10:

Gendron discloses:

- wherein said user editing interface comprises a function module selection panel, a selected module panel, and an editorial management panel, wherein said function module selection panel comprises selectable commands, including determining test commands in human readable programming languages,

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programming flow lines representing direction of flow of said program and functional commands, wherein when a command is selected from said function module selection panel, said command being selected appears in said selected module panel and, by arranging said commands being selected into a flow chart form, said visual graphic program is completed (see at least col. 12, line 14-37 **"in using a Softron in a Visual Program, the user normally follows a defined sequence. First, he or she selects (or if necessary, creates) the Softron itself...."**; **Note:** Therefore, It is inherent in the Gendron in order to create a visual graphical program).

As per claim 11:

Gendron discloses:

- assigning one or more function modules each of which is provided with an applicable functional program or command stored in a computer executable language in a processing unit to accomplish a substantial application function (see at least col. 8, line 14-16 **"A visual program is a logical sequence of executable computer instructions expressed by grouping graphical non-linguistic, descriptions for operators and data"** and col. 11, line 8-10 **"A Visual Program is a set of Softrons connected by parameters and control lines. Softrons are therefore program modules..."**);
- connecting said function modules in a predetermined sequence with one or more programming flow lines, each pointing from one direction to another to construct

a visual graphic program (see at least col. 8, line 18-24 **"All programming constructs are created by arranging lines and boxes on the screen. The lines and boxes control execution flow, define what data is shared among program segments...the graphical translator converts the diagram directly to the executable computer instructions"**); and

- compiling said visual graphic program to machine readable codes of said computer executable language, wherein a logical execution sequence of said visual graph program is designated and illustrated through connection of said function modules with said programming flow lines so as to construct a finish program in said computer executable language in said processing unit (see at least col. 8, line 22-24 **"The graphical translator converts the diagram directly to the executable computer instructions"**).

As per claim 12:

Gendron discloses:

- a step of assigning one or more determination modules each of which is provided with a determining test stored in said computer executable language in said processing unit, wherein each of said determination modules is connected with three of said function modules and other said determination modules at an determination entrance, a "True" exit and a "False" exit thereof by three of said programming flow lines to construct said visual graphic program, wherein after said visual graphic program is compiled to said machine readable codes, each of

said determination modules executes said determining test (see at least col. 11, line 47-64 **"...when control enters the Softron, execution of the machine begins...control leaves the Softron on the Control Out line... in some cases, control will not leave this way, but instead will go back the way it came... this happens when there is a Boolean (true or false) condition to be evaluated in the Machine (like an "IF" construct) and the condition is false..."** - **Note:** Softrons are included both function modules and determination modules; also see at least FIGS. 12-15).

As per claims 13 and 14:

Gendron discloses:

- wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules by two of said programming flow lines, wherein each of said programming flow lines is connected from said connecting exit of one of said function modules to said connecting entrance of another of said function modules (see at least col. 11, line 35-46 **"Parameters may be passed to the Softron via the Parameter In line...if the Softron will provide any results as parameters to other Softrons, they flow out the Parameter Out line"**).

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As per claim 15:

Gendron discloses:

- wherein each of said function modules has at least an connecting entrance and an connecting exit to connect with two of other said function modules and said determination modules by two of said programming flow lines, wherein by means of said programming flow lines, said connecting entrance of one of said function modules is capable of connecting to one of said "True" exit and said "False" exit of another said determination modules and said connecting exit of one of said function modules is capable of connecting with said determination entrance of one of said determination modules (see at least col. 11, line 35-46 "**Parameters may be passed to the Softron via the Parameter In line...if the Softron will provide any results (again, in the form of Softrons) as parameters to other Softrons, they flow out the Parameter Out line**" – **Note:** Softrons are included both function modules and determination modules; also see at least FIGS. 12-15).

As per claim 16:

Gendron discloses:

- wherein human readable source codes of a source code program are converted and arranged into different said function modules and said determination modules of said visual graphic program according to a conversion rules database (see at least col. 8, line 28-31 "**The Visual Programming Environment has a**

**rich structured library of elemental software units, call Softrons, to use as a starting point for development of a computer program”).**

As per clam 17:

Gendron discloses:

- wherein said visual graphic program is constructed by a user editing interface by selecting said function modules and said determination modules and linking said function modules and said determination modules being selected by said programming flow lines (see at least col. 10, line 24-26 **“The Visual Programming Environment offers computer support for the on-screen creation of software design diagram”**), and said human readable code program is converted by a compiler into machine readable codes of said computer executable language following predetermined conversion instructions of said conversion rules database (see at least col. 8, line 22-24 **“the graphical translator converts the diagram directly to the executable computer instructions”**).

As per claim 18:

Gendron discloses:

- establishing a conversion rule database containing conversion instructions of converting selectable commands to machine readable codes (see at least 35-41

**"...he or she will see a screen that allows easy access to the library of**

**Softrons..."; also see at least col. 21, line 39-67 "A Rule Based System Shell")**

- providing a selection platform, wherein said selectable commands are listed out for a user to select a set of selected commands according to a desired flow of functions to be performed (see at least col. 12, line 14-16 **"In using a Softtron in a Visual Program, the user normally follows a defined sequence. First, he or she selected (or if necessary, creates) the Softtron itself"**; see at least col. 11, line 9-10 **"Softrons are therefore program modules"**); and
- compiling said selected commands into machine readable codes according to said set of conversion instructions (see at least col. 8, line 22-24 **"The graphical translator converts the diagram directly to the executable computer instructions"**).

As per claim 19:

Gendron discloses:

- a sub-step of storing said selected commands inside a processing unit **(It is inherent in order to converts the diagram to executable computer instructions).**



As per claim 20:

Gendron discloses:

- a) establishing a reverse conversion rule database containing reverse conversion instructions of reverse converting machine readable codes of said designed computer program to human understandable codes (see at least col. 8, line 28-29 **"a rich structured library of elemental software units, called Softrons"**; also see at least col. 21, line 40-67 **"A Rule Based System Shell"**);
- establishing a set of conversion rule database containing conversion instructions of converting selectable commands to machine readable codes (see at least col. 8, line 28-29 **"a rich structured library of elemental software units, called Softrons"**; also see at least col. 21, line 40-67 **"A Rule Based System Shell"**);
- providing an imported code viewing platform, wherein said machine readable codes of said designed computer program are converted to and listed out as said human understandable codes according to said reversion conversion instructions (see at least col. 10, line 24-26 **"The Visual Programming Environment offers computer support for the on-screen creation of software design diagrams"**);
- providing an editing platform, wherein selectable commands are listed out for a user to insert selected commands into said human understandable codes and deleting sections of said human understandable codes, forming a set of edited codes, according to a desired flow of functions to be performed (see at least col. 12, line 14-16 **"In using a Softron in a Visual Program, the user normally follows a defined sequence. First, he or she selected (or if necessary,**

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**creates) the Softron itself**"; see at least col. 11, line 9-10 **"Softtrons are therefore program modules"**); and

- compiling said edited codes into machine readable codes following said set of conversion rules (see at least col. 8, line 22-24 **"The graphical translator converts the diagram directly to the executable computer instructions"**).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PN  
3/30/2007



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